

REMARKS

Prior to entry of this amendment, claims 1-20 are currently pending in the subject application. Claims 1 and 17 are independent. Claims 17 and 19 have been amended, and support for the amendments to claims 17 and 19 may be found in paragraph [0001] of the specification. Claims 21 and 22 have been added, and support for claims 21 and 22 may be found in paragraph [0043] of the specification. Support for the amendments to the specification may be found in paragraph [0001] of the specification. No new matter is added.

Applicants note with appreciation the Examiner's acknowledgement of applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants request, in the next Office action, that the Examiner indicate the acceptability of the drawings filed on September 15, 2003.

Applicants note with appreciation the Examiner's consideration of applicants' Information Disclosure Statements filed January 15, 2004, and February 2, 2005.

A. Introduction

In the outstanding Office action, the Examiner rejected claim 17 and 19 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement; rejected claims 18 and 20 under 35 U.S.C. § 112, first paragraph, as being dependent on claim 17; rejected claims 1-3, 5-18, and 20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,829,559 to Bultman et al. ("the Bultman et al. reference"); and objected to claim 4 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

B. Rejection of Claims 17-20 under 35 U.S.C. § 112, First Paragraph

In the outstanding Office action, the Examiner rejected claim 17 and 19 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement and

rejected claims 18 and 20 under 35 U.S.C. § 112, first paragraph, as being dependent on claim 17. This rejection is respectfully traversed for at least the reasons set forth below.

Claim 17 has been amended to recite, “inspecting results of an edge bead removal process and an edge exposure of wafer process.” Claim 19 has also been amended to recite a “wafer process.” These limitations find support in paragraph [0001] of the specification, which recites, “inspecting results of an edge bead removal (EBR) process and an edge exposure of wafer (EEW) process.” EBR/EEW processing is discussed at numerous places in the specification, e.g., in paragraphs [0006], [0034], [0036], [0040], [0041], [0044], etc.

As a result, the subject matter of claims 17-20 are fully enabled by the specification so that one of ordinary skill in the art can practice the invention.

For the above reasons, applicants submit that this rejection under 35 U.S.C. § 112, first paragraph is traversed, and reconsideration and withdrawal thereof is respectfully requested.

C. Asserted Obviousness Rejection of Claims 1-3, 5-18, and 20

In the outstanding Office action, the Examiner rejected claims 1-3, 5-18, and 20 under 35 U.S.C. § 103(a) as being unpatentable over the Bultman et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

Embodiments of the present invention pertain to an apparatus and method for inspecting a substrate, which transfers a substrate between two stages. Claim 1 of the application recites, in part:

a first stage for supporting a substrate; a first image acquisition unit for acquiring a first image of a peripheral portion of the substrate supported by the first stage; a second stage for supporting the substrate; a second image acquisition unit for acquiring a second image of the substrate supported by the second stage; a transfer robot for transferring the substrate between the first stage and the second stage.

Independent claim 17 of the application contains similar embodiments.

The separateness of the two stages of the present invention may be observed in FIG. 2, which is reproduced below.

FIG. 2

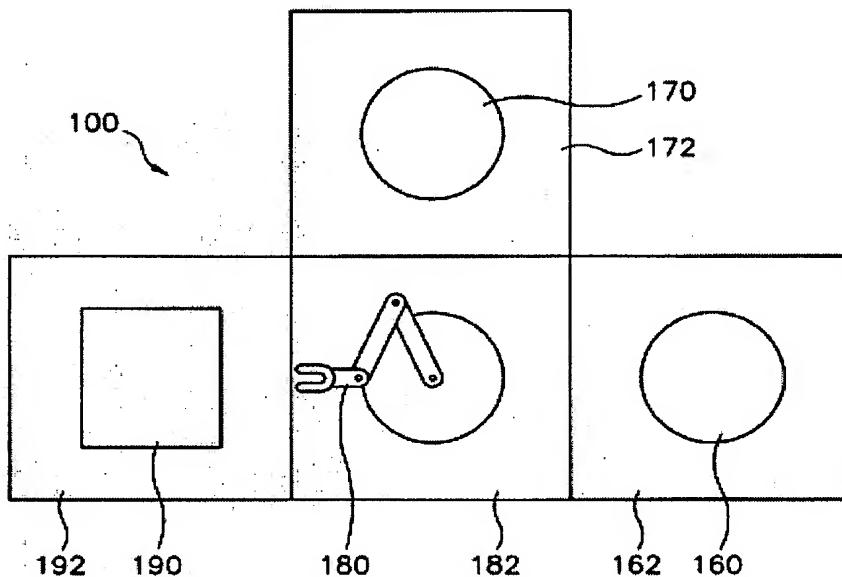


FIG. 2 of the application illustrates a first stage 160 separated from a second stage 170 by being located in first and second inspection chambers 162 and 172. A transfer robot 180 may transfer a semiconductor wafer from the first stage 160 to the second stage.

The Bultman et al. reference relates to determining macro and micro defects on a specimen. The Bultman et al. reference fails to disclose or suggest two stages.

At page 3 of the Office action, the Examiner refers to FIG. 12 of the Bultman et al. reference. At page 3, lines 14-17, of the Office action, the Examiner states: "Although Bultman et al. does not expressly use the language first stage and second stage, an ordinary artisan would have recognized the two separate blocks identified as item 42, in Figure 12 to be two stages that are set to support the specimen/wafer under measurement/inspection."

FIG. 12 of the Bultman et al. reference is reproduced below.

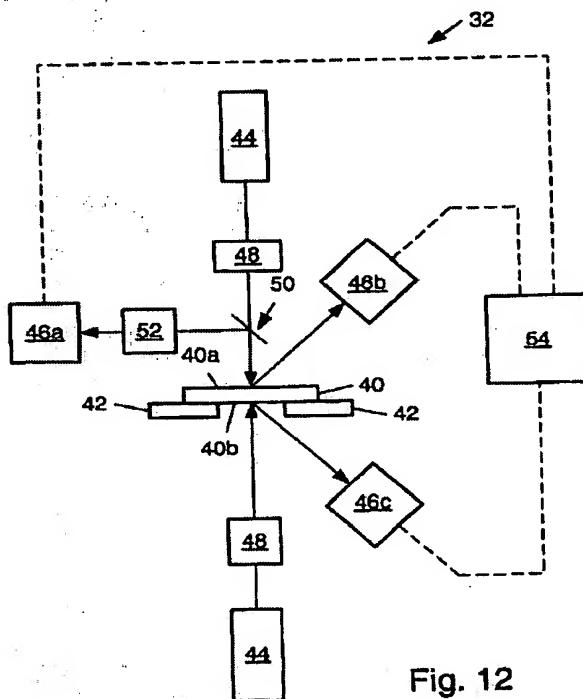


Fig. 12

At column 51, lines 29-46, of the Bultman et al. reference, the stage 42 is described as being a single stage, stating:

System 32 may include stage 42 configured to support specimen 40. As shown in FIG. 12, stage 42 may contact a back side of the specimen proximate to an outer lateral edge of the specimen to support the specimen. For example, the stage may include a robotic wafer handler configured to support a specimen. In alternative embodiments, an upper surface of the stage may be configured to have a surface area less than a surface area of the back side of the specimen. In this manner, stage 42 may contact a back side of the specimen proximate to a center, or an inner surface area, of the specimen to support the specimen. In an example, the stage may include a vacuum chuck or an electrostatic chuck. Such a stage may be disposed within a process chamber of a process tool such as a semiconductor fabrication process tool and may be configured to support the specimen during a process step such as a semiconductor fabrication process step. Such a stage may also be included in any of the other measurement devices as described herein.

There is no teaching or suggestion in the Bultman et al. reference that the stage 42 constitutes two stages, it is clearly a single stage supporting a single wafer for measurements of both sides of the wafer. One of ordinary skill in the art would assume that the stage 42 is not two stages, but rather is a stage having a section removed, i.e., having a doughnut-shaped or annular geometry, to allow observation of both sides of the wafer.

Further, there is no teaching or suggestion to use a robot to transfer the substrate between the first and second stages, as recited in claims 1 and 17.

Moreover, there is no teaching or suggestion in the Bultman et al. reference of first and second stages being in respective first and second inspection chambers, such as is set forth in claims 21 and 22 of the present application.

As a result, one of ordinary skill in the art would not be motivated by the Bultman et al. reference to produce independent claims 1 and 17 of the present application. A *prima facie* case of obviousness has thus not been made. Claims depending upon claims 1 or 17 are patentable for at least the above reasons.

For the above reasons, applicants submit that this rejection over the Bultman et al. reference is traversed, and reconsideration and withdrawal thereof is respectfully requested.

D. Allowable Subject Matter

Applicants note with appreciation the Examiner's indication of allowable subject matter in claim 4. However, it is respectfully submitted that all of the pending claims are in condition for allowance.

E. Conclusion

The remaining document cited by the Examiner was not relied on to reject the claims. Therefore, no comments concerning this document are considered necessary at this time.

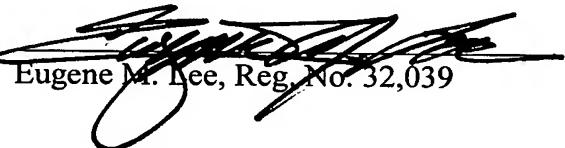
If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

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PETITION and
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This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.